PAR 1420.1 Working Group Meeting #3

November 18, 2014

Overview

- Proposed changes to rule language
- Analysis of ambient air lead concentrations
- Rule schedule

Definitions

- Expanding definition of “Maintenance Activity” to include soil disturbance activities such as:
  - Grading
  - Remediation, soil sampling and other monitoring and clean-up related activities

Ambient Lead Concentration Limit

- Prior to January 1, 2016: 0.150 ug/m^3
- On and after January 1, 2015: 0.110 ug/m^3 limit
- Same averaging period – any 30-consecutive days
- 2013 ambient monitoring data indicates proposed limit can be met on routine basis
- Nearly all exceedances of proposed limit in 2013 due intermittent single day spikes

Point Source Emission Controls

- Prior to January 1, 2016: 0.045 lb/hr
- On and after January 1, 2016: 0.023 lb/hr
  - 50% reduction in total facility mass lead emission limit
- Source tests used for 2012 HRA showed Exide can meet overall lead emission rate of 0.023 lb/hr
  - Concurrent lead emission reductions expected with installation of additional arsenic controls
- Quemetco already meets 0.023 lb/hr
- Not recommending lowering to 0.003 lb/hour

Compliance Plan Lead Thresholds

Current requirement: Submit compliance if ambient lead concentration exceeds 0.120 ug/m^3

Effective July 1, 2015: Submit compliance plan if ambient lead concentration exceeds 0.110 ug/m^3

Housekeeping Requirements

- Slag, scrap and other lead or arsenic containing material must be stored away from doors of total enclosures
- Lead or arsenic containing trash and debris must be kept in covered, leak-free containers
- Facilities must maintain a plant-wide speed limit of 5 miles per hour

Maintenance Activity

- Additional requires for maintenance activities conducted outside total enclosure
  - Reduce wind speed limits from 25 to 20 mph when maintenance work should be stopped
  - Plastic sheeting that is at least 10 mil thickness over exposed soil
  - Cutting or drilling done under 100% wet conditions
  - Grading of soil with a measured minimum 12% moisture content
- Additional measures mirror some provisions in Exide's dust mitigation plan

Ambient Air Sampling

- Effective date of adoption, sampling frequency for lead and arsenic increased from 1 in 3 days to daily
- Removed provision to trigger daily sampling after an exceedance of lead or arsenic concentration limits
  - Provides greater assurance that ambient concentration limit is achieved
- Retain samples for one year

Monitor Failure Provisions

- Added provision for monitor failure based on input from Working Group
- Specific provisions if a 24-hour sample is not collected due to monitor malfunction or other occurrence beyond the control of the facility
- “Monitor malfunction” does not include power failure
  - All ambient monitors required to have uninterruptible power supplies (j)(7)

Monitor Failure Provisions *(Continued)*

- If monitor failure, operator must:
  - Report with a notification made to 1-800-CUT-SMOG within 2 hours of knowing that sample was not collected
  - If a sample was collected for at least 23 hours, operator should submit a “23-hour” sample
    - “23-hour” sample cannot be submitted more than three days over a consecutive 30 day period; or
  - Allows for 1 missing day within a consecutive 30-day period

Source Tests

- Rule 1420.1 currently requires
  - Source testing annually; and
  - If any point source is <0.0025 lb/hr source testing biannually
- PAR 1420.1 lowers threshold from 0.0025 to 0.0012 lb/hr for biannual testing
- Seek approval from either Air Resources Board or U.S. EPA when using alternative or equivalent source test method

Reporting Ambient Lead Concentrations >0.300 ug/m^3

- Operators required to report to Executive Officer if the ambient lead concentration for any 24-hour sample is > 0.300 ug/m^3
- Must report within 72 hours of when the facility knew or should have known lead concentration > 0.300 ug/m^3
- Operator must report following information:
  - Date of the occurrence;
  - Name of the monitor;
  - Ambient lead concentration at the monitor for the 24-hour sample;
  - Potential cause or causes of the occurrence; and
  - Remedies to prevent the reoccurrence

Caution Sign for Digging Activities

- Added provision to install a sign that says:

  Caution
  Lead-Acid Battery Recycling Facility
  Call before digging

- Sign requirements:
  - Facility contact phone number
  - Installed at all entrances and at intervals of 330 feet or less along perimeter
  - Sign measures at least 30 inches wide by 30 inches tall
  - Lettering at least 2 inches tall with text contrasting with the sign background
  - Located between 6 and 8 feet above grade from the bottom of the sign

Curtailment

- Curtailments thresholds based on ambient lead concentration limit and total facility mass emission rate
- Proposal to reduce both ambient lead concentration limit (d)(1) and total facility mass emission rate (f)(1)(A)
  - Initial ambient lead curtailment threshold will be reduced from 0.150 ug/ m^3 to 0.110 ug/m^3 (effective 1/1/2016)
  - Initial lead emission rate curtailment threshold will reduced from 0.045 lb/hr to 0.023 lb/hr (effective 1/1/2016)
  - All other curtailment thresholds will remain the same

Ambient Lead Concentration Overview

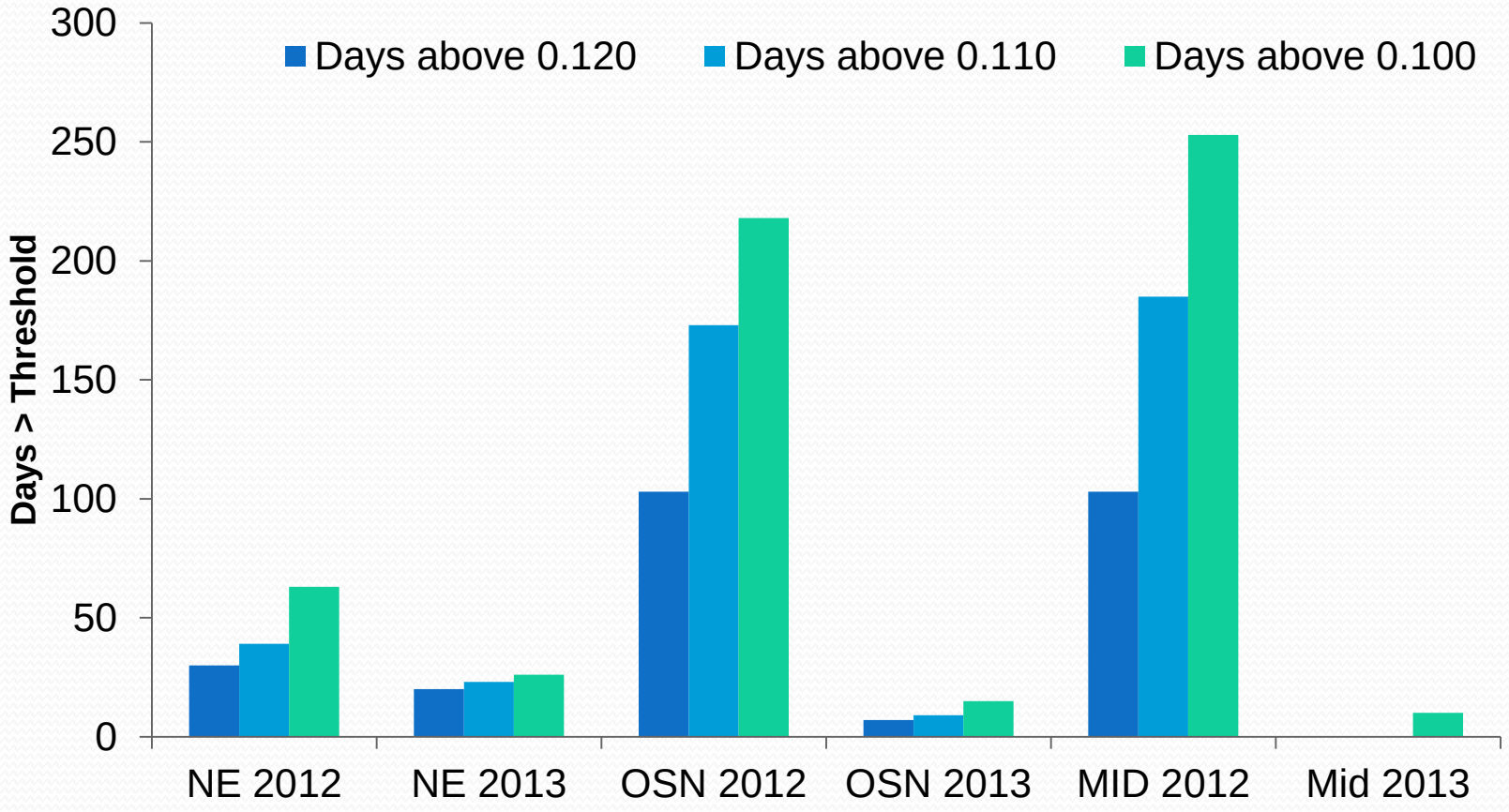
- Review of ambient lead concentrations from 2012 through 2013
  - Current ambient lead concentration limit effective 1/1/2012
  - Excludes Exide ambient monitoring results after 9/16/13
    - DTSC activity after 9/16/13
    - Temporary facility closure
- Noticeable improvements from 2012 to 2013
  - Fewer spikes above 0.300 ug/m^3
  - Less days over proposed ambient concentration limit
  - Nearly all days over proposed ambient concentration limit due to spikes

2012-2013 Exide Monitor Summary

2012 -2013 Exide Monitor Data[1]	Rail	SE	SW	NE	OSN	MID
Dates w spikes	0	0	0	4	2	4
Dates above 0.120	0	0	0	50	110	103
Dates above 0.110	0	0	0	62	182	185
Dates above 0.100	0	0	0	89	233	263

1. Excludes 9/16/13 through 12/31/13

Number of Days Exceeding Ambient Lead Concentration for Exide

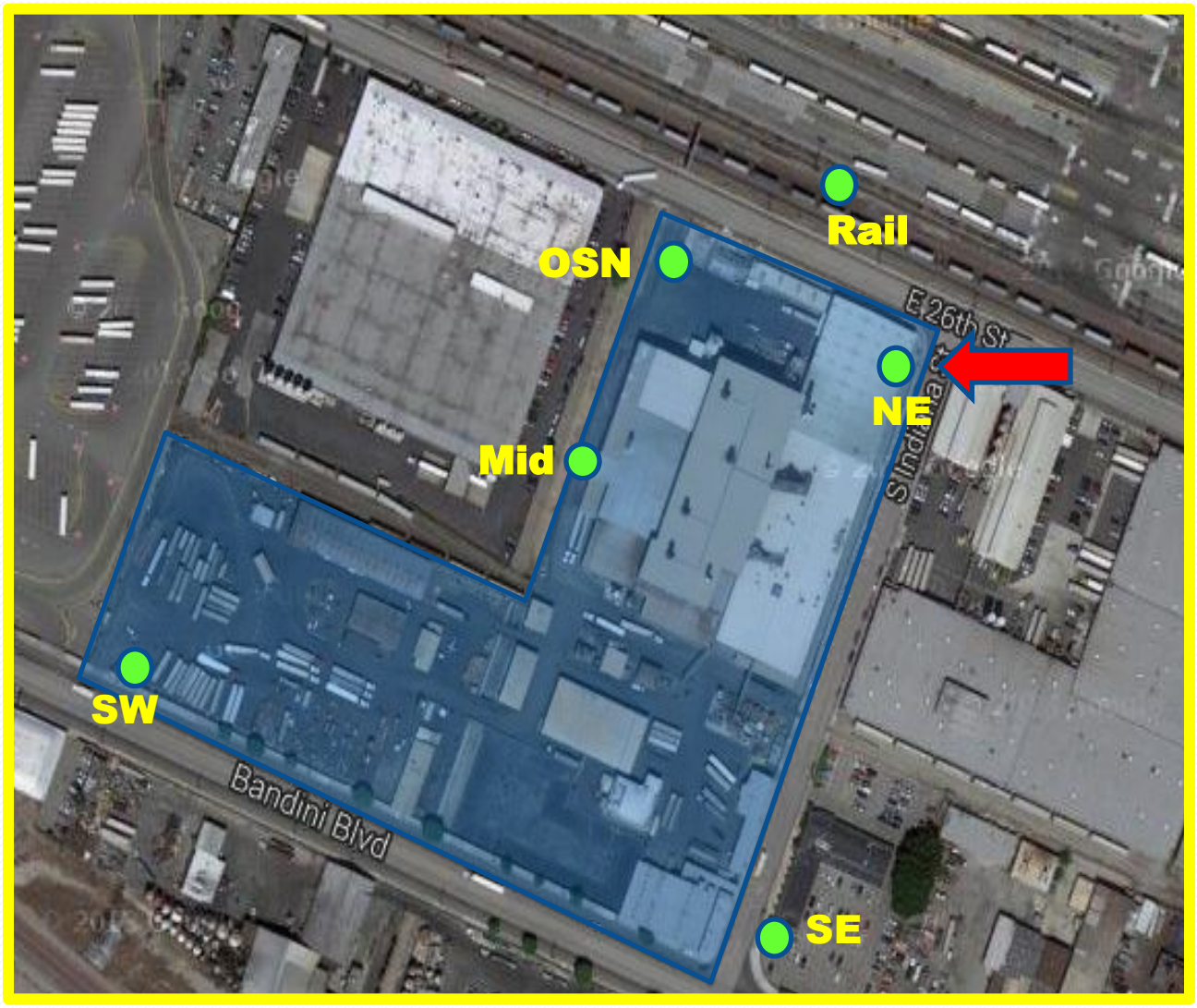


Key Modifications Impacting 2013 Ambient Lead Concentration

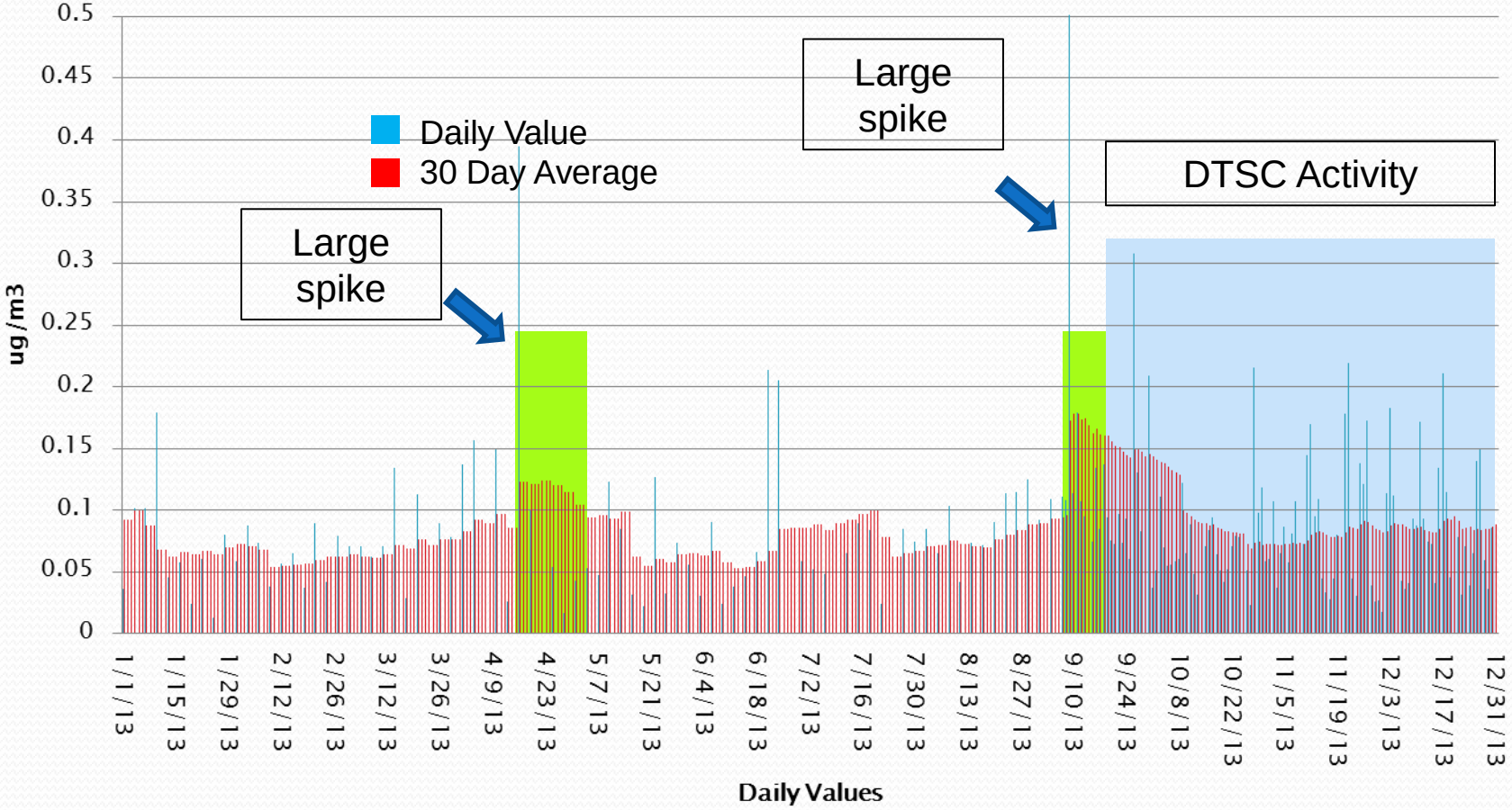
- Installation of HEPA filters on cupola feed room baghouse
- Installation of HEPA filters on MAC baghouses
- General improvement in housekeeping
- Results: noticeable reductions in ambient lead concentrations for MID, OSN and NE monitors in 2013

Exide NE Monitor

Distance to nearest point source:	74m
2012 average ambient lead concentration	0.089 ug/m^3
2013 average ambient lead concentration	0.088 ug/m^3
Modeled contribution from all point sources:	65%
Modeled contribution from fugitive emissions:	35%



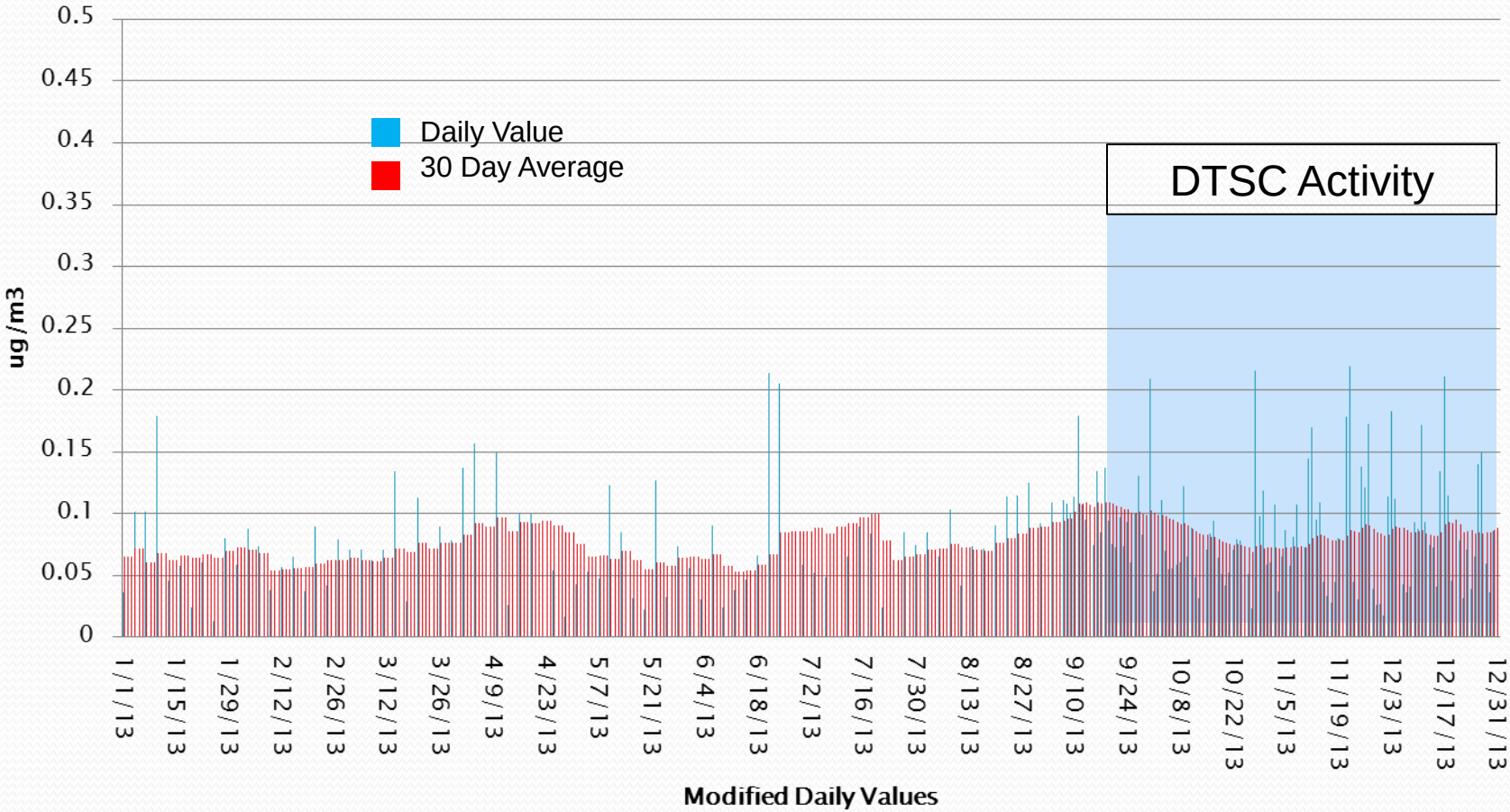
Exide NE 2013



# of spikes (>0.300 ug/m3)	# of days exceeding 0.110 ug/m3*
2 (0.5%)	23 (6.3%)

* April to June 2013 DTSC order. Not fully operating. Soil work. Does not include dates after September 16, 2013.

Exide NE 2013 Modified

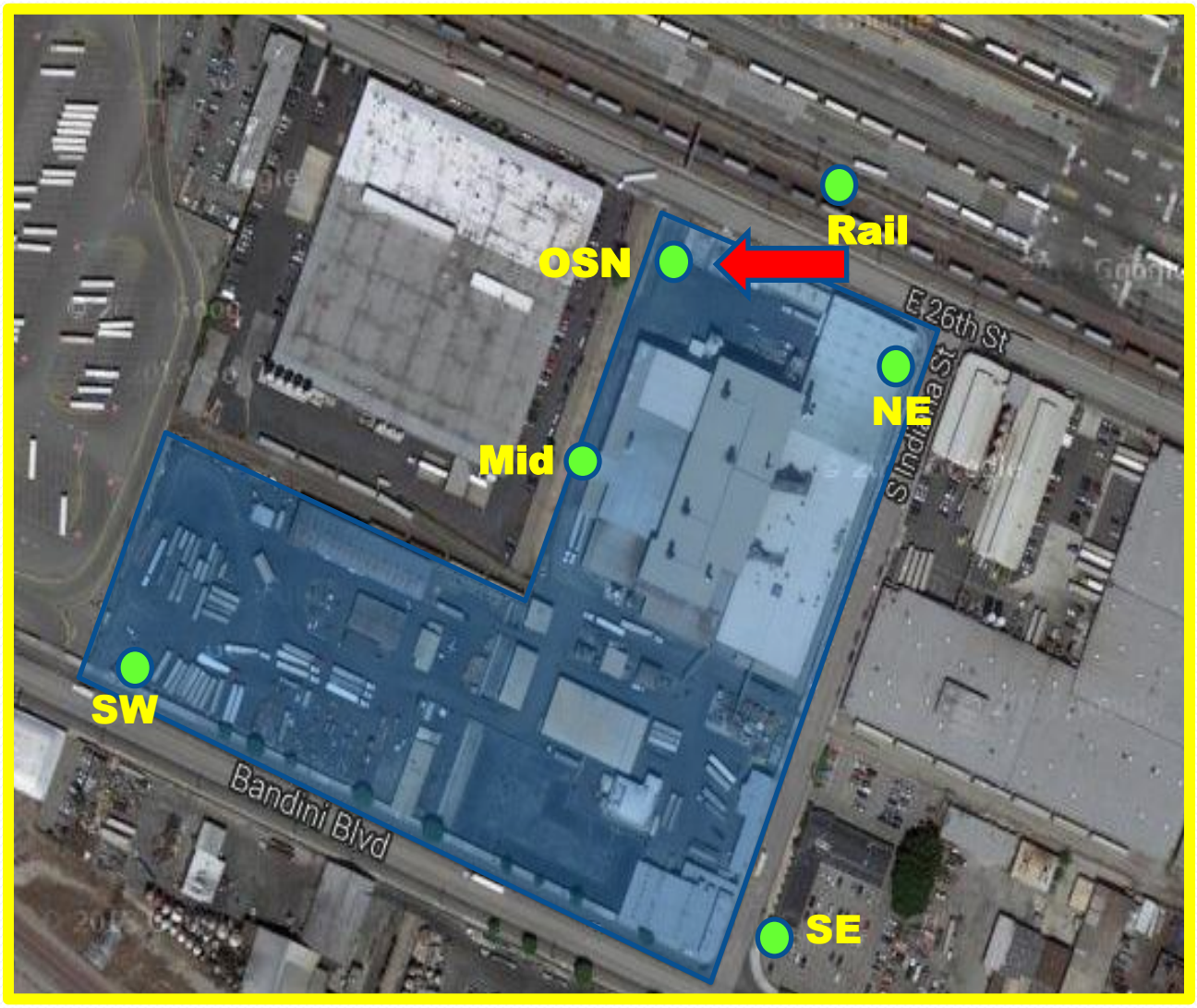


# of spikes (>0.300 ug/m3)	# of days exceeding 0.110 ug/m3*
0 (0.0%)	0 (0.0%)

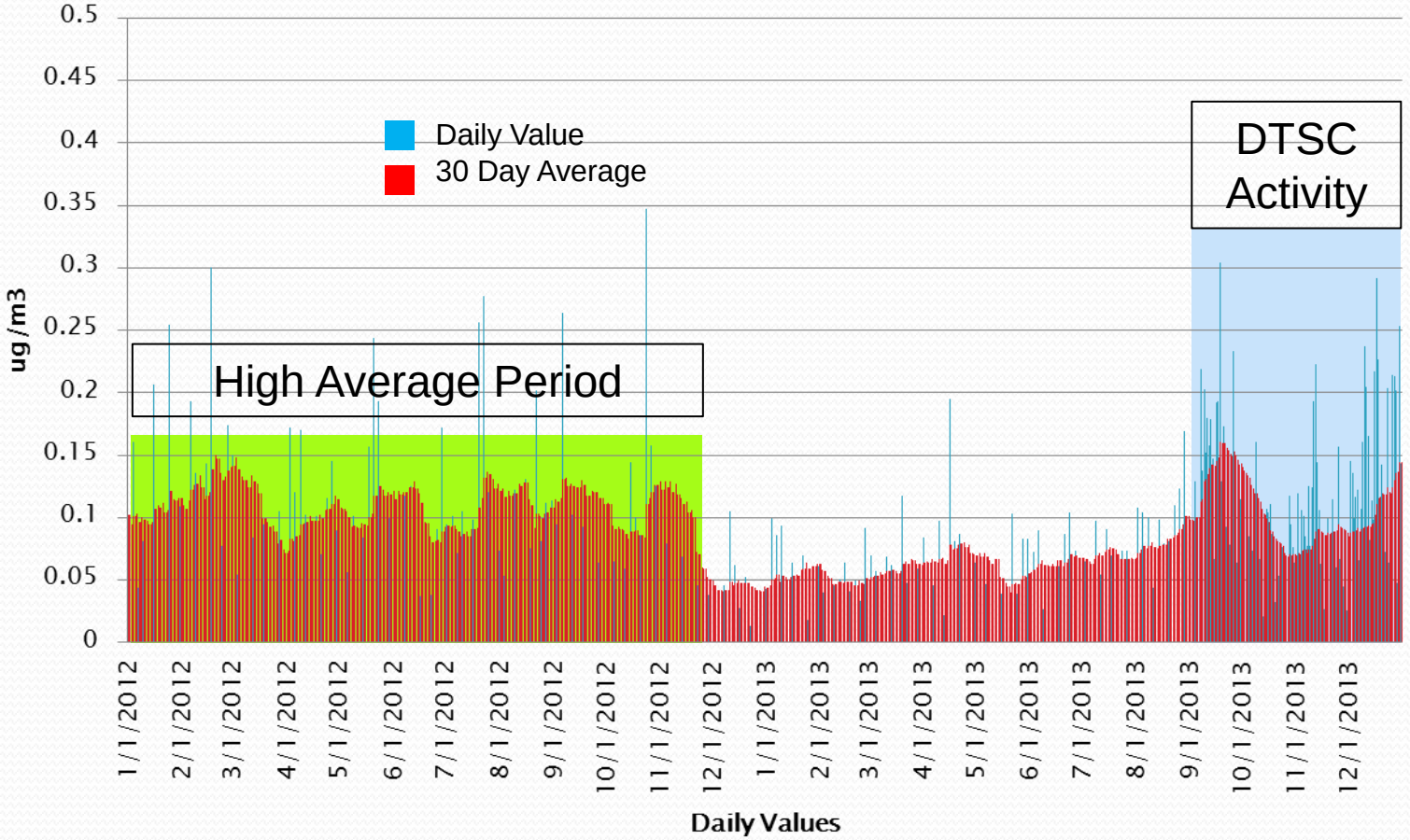
* April to June 2013 DTSC order. Not fully operating. Soil work. Does not include dates after September 16, 2013.

Exide OSN Monitor

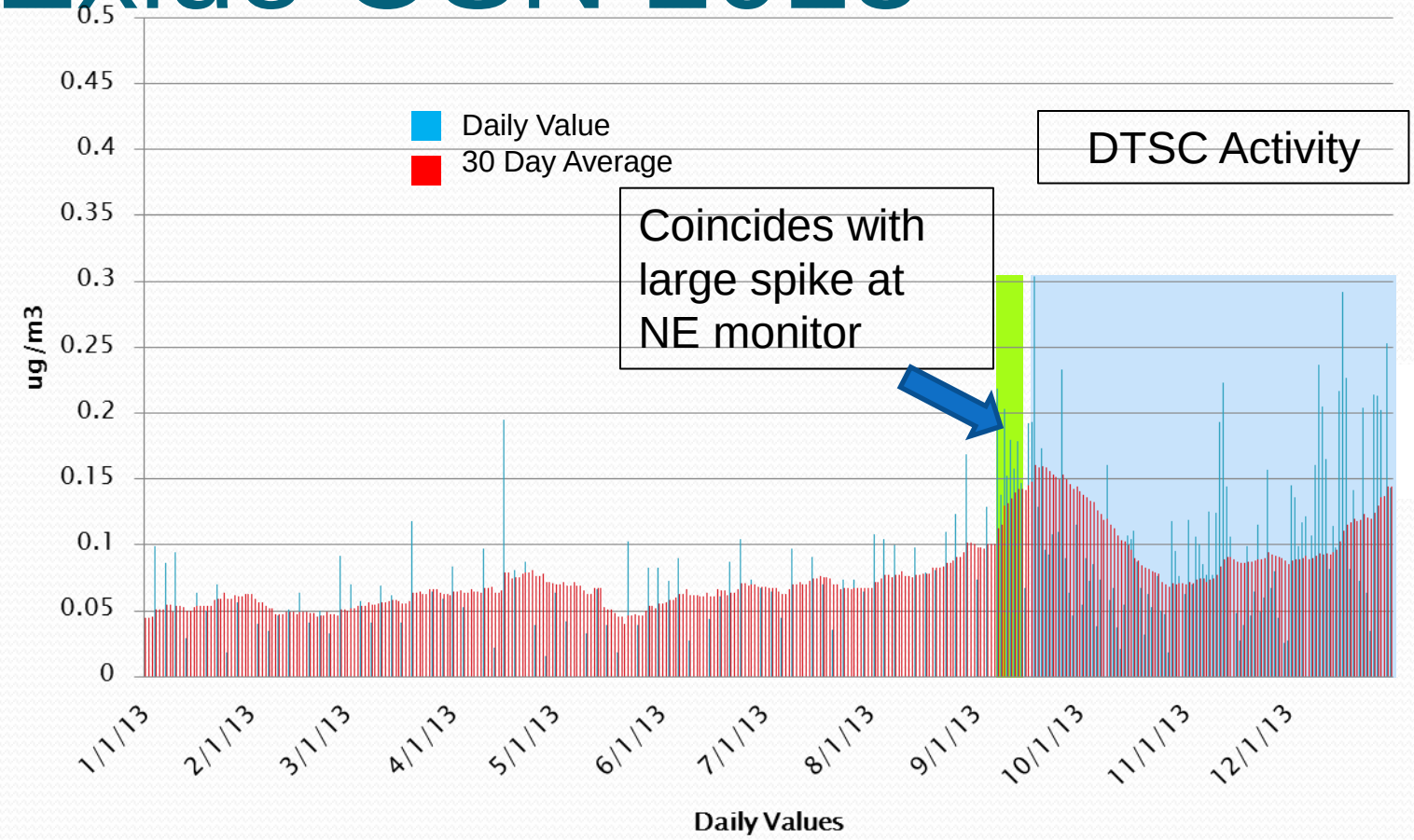
Distance to nearest point source:	80m
2012 average ambient lead concentration	0.101 ug/m^3
2013 average ambient lead concentration	0.092 ug/m^3
Modeled contribution from all point sources:	39%
Modeled contribution from fugitive emissions:	61%



Exide OSN 2012-2013



Exide OSN 2013

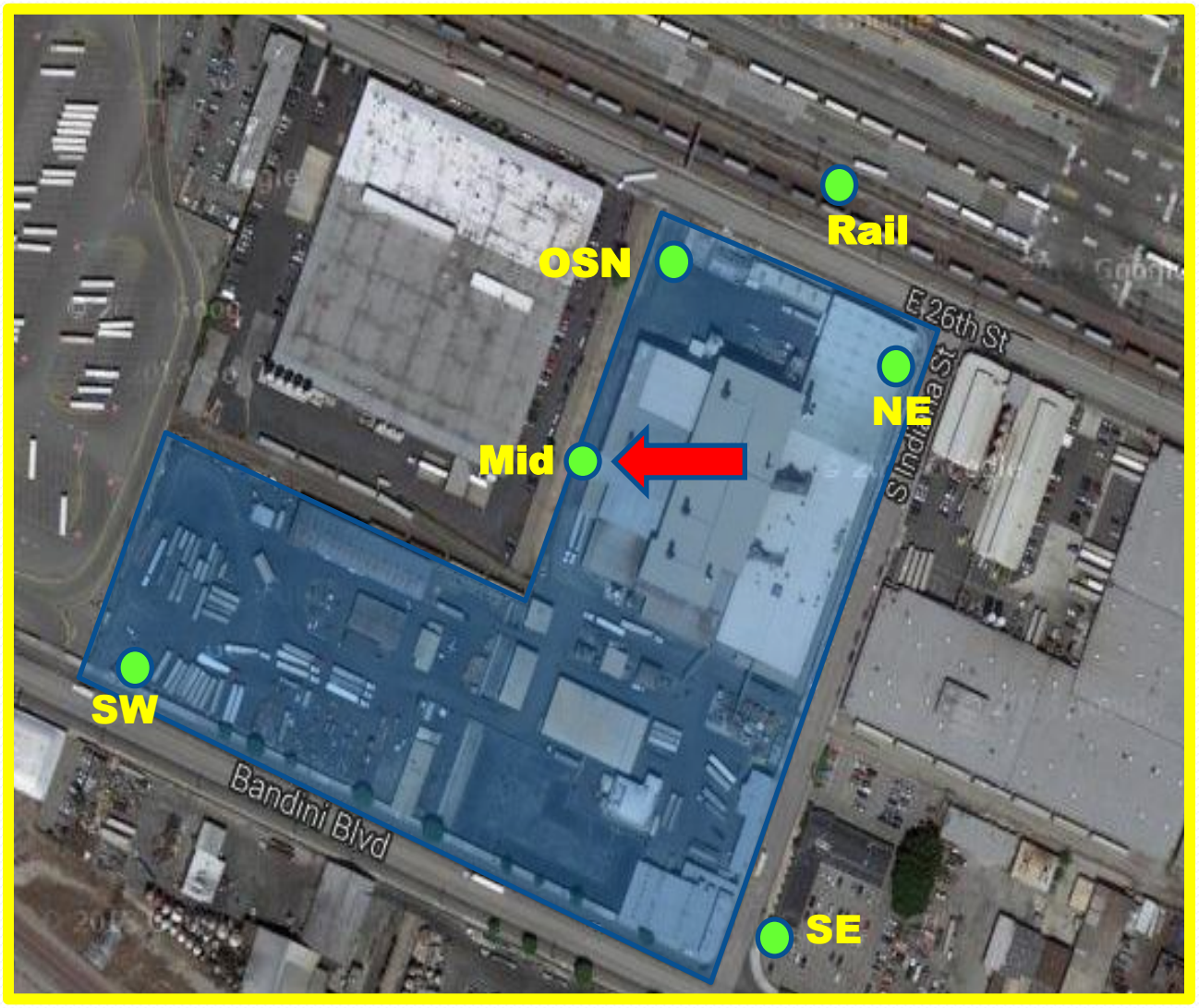


# of spikes (>0.300 ug/m3)	# of days exceeding 0.110 ug/m3*
0 (0.0%)	9 (2.5%)

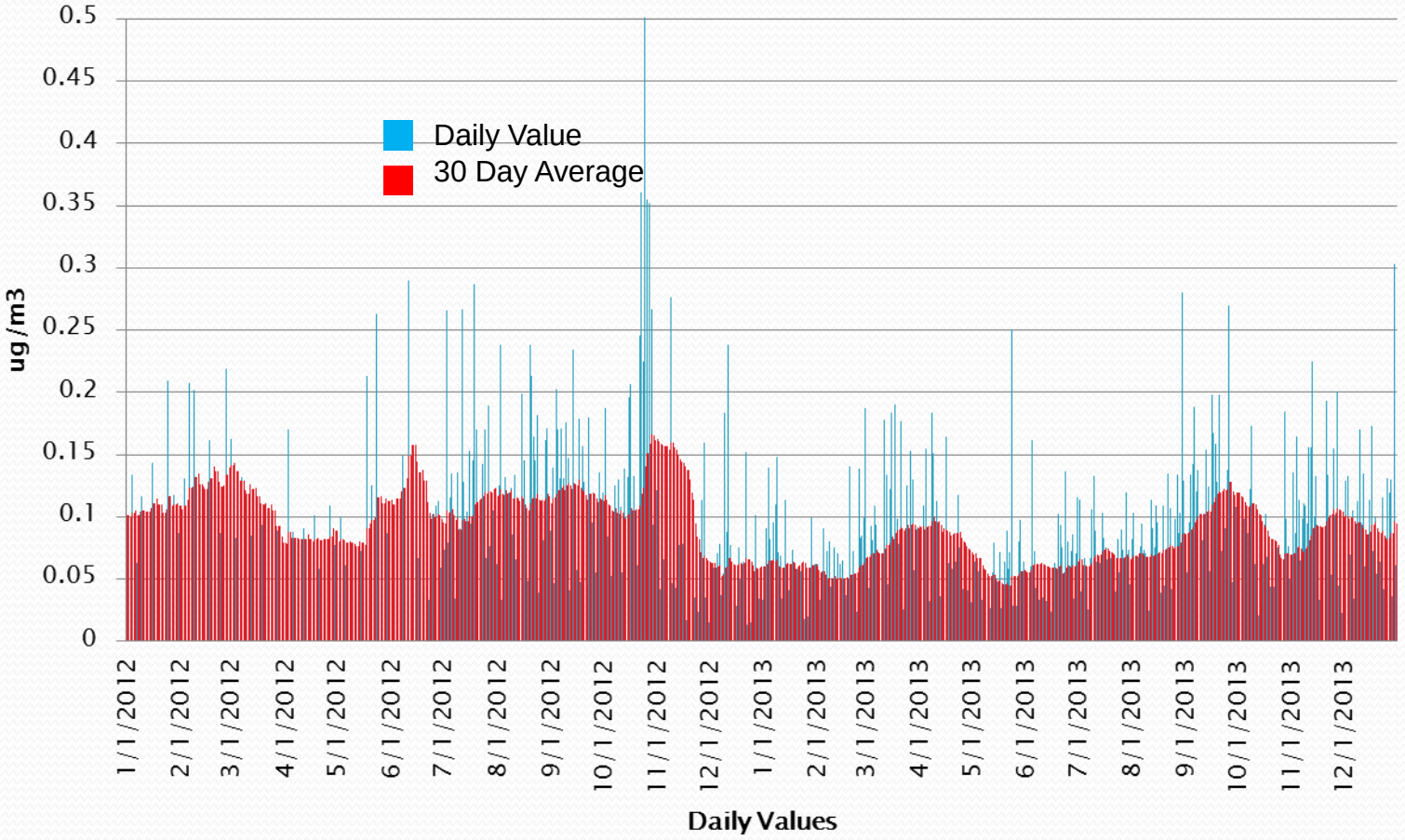
* April to June 2013 DTSC order. Not fully operating. Soil work. Does not include dates after September 16, 2013.

Exide MID Monitor

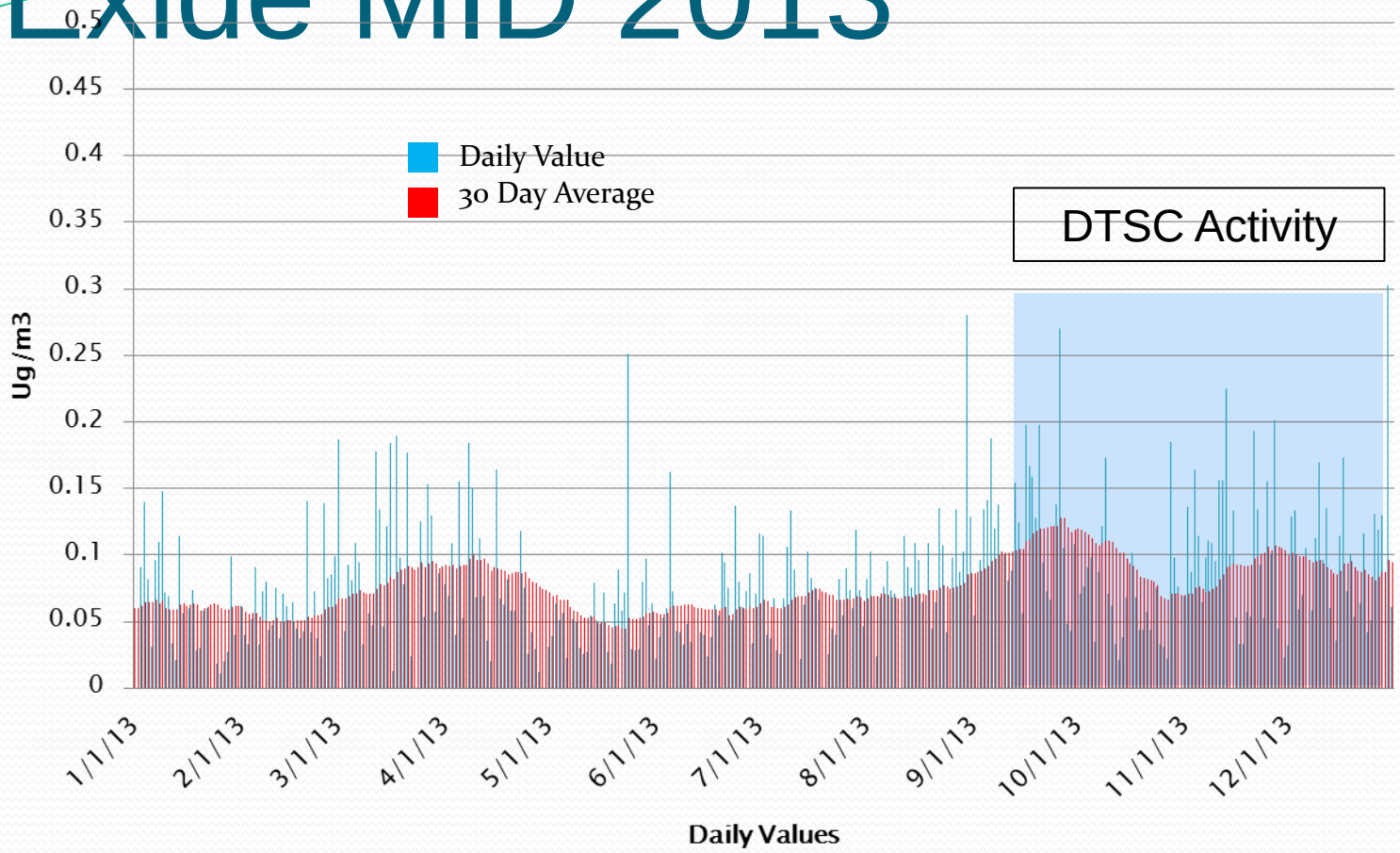
Average distance to point sources:	85m
Distance to nearest point source:	36m
2012 average ambient lead concentration	0.105u g/m^3
2013 average ambient lead concentration	0.079 ug/m^3
Modeled contribution from all point sources:	8%
Modeled contribution from fugitive emissions:	91%



Exide MID 2012-2013



Exide MID 2013



# of spikes (>0.300 ug/m3)	# of days exceeding 0.110 ug/m3*
0 (0.0%)	0 (0.0%)

* April to June 2013 DTSC order. Not fully operating. Soil work. Does not include dates after September 16, 2013.

2013 Exide Monitor Summary

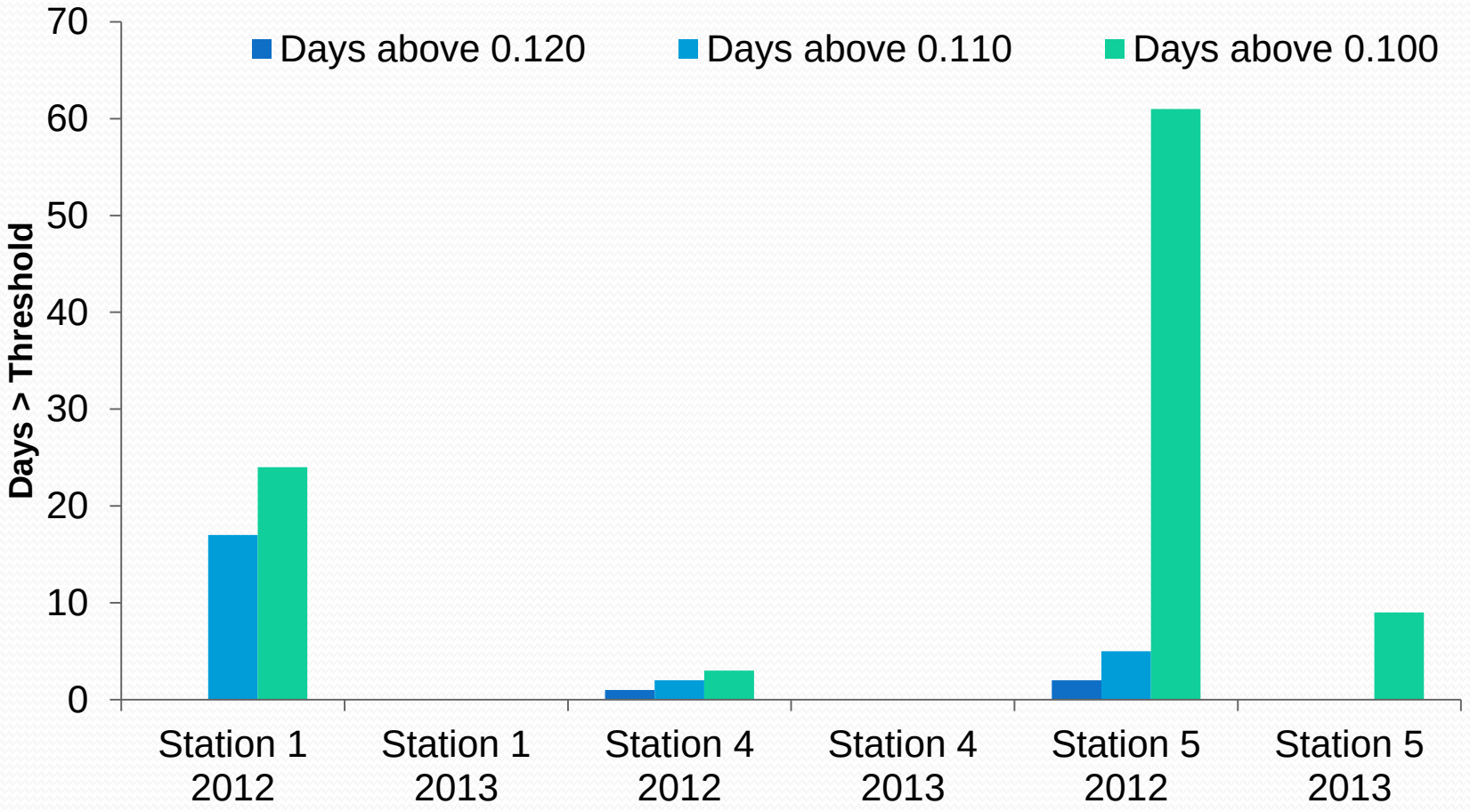
2013 Exide Monitor Data [1]	Rail	SE	SW	NE	OSN	MID
Dates w spikes	0	0	0	2	0	0
Dates above 0.120	0	0	0	20	7	0
Dates above 0.110	0	0	0	23	9	0
Dates above 0.100	0	0	0	26	15	10
Modified (no spikes above 0.300 ug/m3)						
Dates above 0.120	0	0	0	0	7	0
Dates above 0.110	0	0	0	0	9[2]	0
Dates above 0.100	0	0	0	21	15	10

1. Excludes 9/16/13 through 12/31/13
2. Coincides with spike at NE monitor on 9/6/13

2012-2013 Quemetco Monitor Summary

2012-2013 Quemetco Monitor Data	Station 1	Station 2	Station 4	Station 5
Dates w spikes	1	0	2	2
Dates above 0.120 ug/m3	0	0	1	2
Dates above 0.110 ug/m3	17	0	2	5
Dates above 0.100 ug/m3	24	0	3	70
Modified (no spikes above 0.300 ug/m3)				
Dates above 0.120 ug/m3	0	0	0	0
Dates above 0.110 ug/m3	17	0	0	0
Dates above 0.100 ug/m3	24	0	0	42

Number of Days Exceeding Ambient Lead Concentration for Quemetco



Quemetco Ambient Lead Data

- Reduction in ambient lead concentration between 2012 and 2013
- Based on 2013 data, only Station 5 showed an exceedance >0.100 ug/m3
- No exceedances at 0.110 ug/m3 for all monitoring stations

Quemetco Summary 2013

2013 Quemetco Monitor Data	Station 1	Station 2	Station 4	Station 5
Dates w spikes	0	0	1	1
Dates above 0.120 ug/m3	0	0	0	0
Dates above 0.110 ug/m3	0	0	0	0
Dates above 0.100 ug/m3	0	0	0	9
Modified (no spikes above 0.300 ug/m3)				
Dates above 0.120 ug/m3	0	0	0	0
Dates above 0.110 ug/m3	0	0	0	0
Dates above 0.100 ug/m3	0	0	0	3

Schedule

- 2nd Public Workshop – November 19, 2014
  - East LA Library at 6:00 PM
  - 4837 East 3rd Street, Los Angeles
  - Public comments due – December 2, 2014
- Stationary Source Committee – November 21, 2014
- Set Hearing - January 9, 2015
- Public Hearing – February 6, 2015

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